

<110> Urano, Fumihiko

<120> METHODS FOR DIAGNOSING AND TREATING
 ENDOPLASMIC RETICULUM (ER) STRESS DISEASES

<130> 07917-259US1

<150> PCT/US2004/033516

<151> 2004-10-12

<150> US 60/510,262

<151> 2003-10-09

<150> US 60/519,736

<151> 2003-11-12

<150> US 60/568,468

<151> 2004-05-05

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Gly Gln Ala Leu Pro Leu Met Val Pro Ala Gln Arg Gly Ala Ser Pro
      35          40          45
Glu Ala Ala Ser Gly Gly Leu Pro Gln Ala Arg Lys Arg Gln Arg Leu
      50          55          60
Thr His Leu Ser Pro Glu Glu Lys Ala Leu Arg Arg Lys Leu Lys Asn
65          70          75          80
Arg Val Ala Ala Gln Thr Ala Arg Asp Arg Lys Lys Ala Arg Met Ser
      85          90          95
Glu Leu Glu Gln Gln Val Val Asp Leu Glu Glu Glu Asn Gln Lys Leu
      100          105          110
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      115          120          125
Glu Asn Gln Glu Leu Arg Gln Arg Leu Gly Met Asp Ala Leu Val Ala
      130          135          140
Glu Glu Glu Ala Glu Ala Lys Gly Asn Glu Val Arg Pro Val Ala Gly
145          150          155          160
Ser Ala Glu Ser Ala Ala Gly Ala Gly Pro Val Val Thr Pro Pro Glu
      165          170          175
His Leu Pro Met Asp Ser Gly Gly Ile Asp Ser Ser Asp Ser Glu Ser
      180          185          190
Asp Ile Leu Leu Gly Ile Leu Asp Asn Leu Asp Pro Val Met Phe Phe
      195          200          205
Lys Cys Pro Ser Pro Glu Pro Ala Ser Leu Glu Glu Leu Pro Glu Val
      210          215          220
Tyr Pro Glu Gly Pro Ser Ser Leu Pro Ala Ser Leu Ser Leu Ser Val
225          230          235          240
Gly Thr Ser Ser Ala Lys Leu Glu Ala Ile Asn Glu Leu Ile Arg Phe
      245          250          255
Asp His Ile Tyr Thr Lys Pro Leu Val Leu Glu Ile Pro Ser Glu Thr
      260          265          270
Glu Ser Gln Ala Asn Val Val Val Lys Ile Glu Glu Ala Pro Leu Ser
      275          280          285
Pro Ser Glu Asn Asp His Pro Glu Phe Ile Val Ser Val Lys Glu Glu
      290          295          300
Pro Val Glu Asp Asp Leu Val Pro Glu Leu Gly Ile Ser Asn Leu Leu
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Ser Ser Ser His Cys Pro Lys Pro Ser Ser Cys Leu Leu Asp Ala Tyr
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Ser Asp Cys Gly Tyr Gly Gly Ser Leu Ser Pro Phe Ser Asp Met Ser

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      20          25          30
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      35          40          45
Glu Ala Ala Ser Gly Gly Leu Pro Gln Ala Arg Lys Arg Gln Arg Leu
      50          55          60

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Glu	Leu	Glu	Gln	Gln	Val	Val	Asp	Leu	Glu	Glu	Glu	Asn	Gln	Lys	Leu
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Leu	Leu	Glu	Asn	Gln	Leu	Leu	Arg	Glu	Lys	Thr	His	Gly	Leu	Val	Val
				115						120				125	
Glu	Asn	Gln	Glu	Leu	Arg	Gln	Arg	Leu	Gly	Met	Asp	Ala	Leu	Val	Ala
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Glu	Glu	Glu	Ala	Glu	Ala	Lys	Gly	Asn	Glu	Val	Arg	Pro	Val	Ala	Gly
145						150					155				160
Ser	Ala	Glu	Ser	Ala	Ala	Leu	Arg	Leu	Arg	Ala	Pro	Leu	Gln	Gln	Val
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Gln	Ala	Gln	Leu	Ser	Pro	Leu	Gln	Asn	Ile	Ser	Pro	Trp	Ile	Leu	Ala
				180						185				190	
Val	Leu	Thr	Leu	Gln	Ile	Gln	Ser	Leu	Ile	Ser	Cys	Trp	Ala	Phe	Trp
				195						200				205	
Thr	Thr	Trp	Thr	Gln	Ser	Cys	Ser	Ser	Asn	Ala	Leu	Pro	Gln	Ser	Leu
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Pro	Ala	Trp	Arg	Ser	Ser	Gln	Arg	Ser	Thr	Gln	Lys	Asp	Pro	Val	Pro
225						230					235				240
Tyr	Gln	Pro	Pro	Phe	Leu	Cys	Gln	Trp	Gly	Arg	His	Gln	Pro	Ser	Trp
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Lys	Pro	Leu	Met	Asn											
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 <213> Homo sapiens

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26

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			20					25					30		
Leu	Asp	Asn	Leu	Asp	Pro	Val	Met	Phe	Phe	Lys	Cys	Pro	Ser	Pro	Glu
			35				40					45			
Pro	Ala	Ser	Leu	Glu	Glu	Leu	Pro	Glu	Val	Tyr	Pro	Glu	Gly	Pro	Ser
			50			55					60				
Ser	Leu	Pro	Ala	Ser	Leu	Ser	Leu	Ser	Val	Gly	Thr	Ser	Ser	Ala	Lys
65					70					75					80
Leu	Glu	Ala	Ile	Asn	Glu	Leu	Ile	Arg	Phe	Asp	His	Ile	Tyr	Thr	Lys
			85						90					95	
Pro	Leu	Val	Leu	Glu	Ile	Pro	Ser	Glu	Thr	Glu	Ser	Gln	Ala	Asn	Val
			100					105					110		
Val	Val	Lys	Ile	Glu	Glu	Ala	Pro	Leu	Ser	Pro	Ser	Glu	Asn	Asp	His
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Pro Glu Phe Ile Val Ser Val Lys Glu Glu Pro Val Glu Asp Asp Leu
 130 135 140
 Val Pro Glu Leu Gly Ile Ser Asn Leu Leu Ser Ser Ser His Cys Pro
 145 150 155 160
 Lys Pro Ser Ser Cys Leu Leu Asp Ala Tyr Ser Asp Cys Gly Tyr Gly
 165 170 175
 Gly Ser Leu Ser Pro Phe Ser Asp Met Ser Ser Leu Leu Gly Val Asn
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 35 40 45
 Cys Ser Ser Asn Ala Leu Pro Gln Ser Leu Pro Ala Trp Arg Ser Ser
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<213> Homo sapiens

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<211> 616

<212> PRT

<213> Homo sapiens

<400> 39

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 Gln Ala Phe Val Leu Val Phe Leu Leu Gly Lys Val Met Gly Lys Val
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 Phe Phe Gly Gln Leu Arg Ala Ala Glu Met Glu His Leu Leu Glu Arg
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 Ser Trp Tyr Ala Val Thr Glu Thr Cys Leu Ala Phe Thr Val Phe Arg
 85 90 95
 Asp Asp Phe Ser Pro Arg Phe Val Ala Leu Phe Thr Leu Leu Leu Phe
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 Leu Lys Cys Phe His Trp Leu Ala Glu Asp Arg Val Asp Phe Met Glu
 115 120 125
 Arg Ser Pro Asn Ile Ser Trp Leu Phe His Cys Arg Ile Val Ser Leu
 130 135 140
 Met Phe Leu Leu Gly Ile Leu Asp Phe Leu Phe Val Ser His Ala Tyr
 145 150 155 160
 His Ser Ile Leu Thr Arg Gly Ala Ser Val Gln Leu Val Phe Gly Phe
 165 170 175
 Glu Tyr Ala Ile Leu Met Thr Met Val Leu Thr Ile Phe Ile Lys Tyr
 180 185 190
 Val Leu His Ser Val Asp Leu Gln Ser Glu Asn Pro Trp Asp Asn Lys
 195 200 205
 Ala Val Tyr Met Leu Tyr Thr Glu Leu Phe Thr Gly Phe Ile Lys Val
 210 215 220
 Leu Leu Tyr Met Ala Phe Met Thr Ile Met Ile Lys Val His Thr Phe
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 Pro Leu Phe Ala Ile Arg Pro Met Tyr Leu Ala Met Arg Gln Phe Lys
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 Lys Ala Val Thr Asp Ala Ile Met Ser Arg Arg Ala Ile Arg Asn Met
 260 265 270
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 325 330 335
 Ser Leu Pro Ala Gln Ser Pro Pro Pro Pro Glu Pro Ala Asp Gln Gly
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 Pro Pro Pro Ala Pro His Pro Pro Pro Leu Leu Pro Gln Pro Pro Asn
 355 360 365
 Phe Pro Gln Gly Leu Leu Pro Pro Phe Pro Pro Gly Met Phe Pro Leu
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